

spread of the disease, which is probably localized at present. It is important to investigate thoroughly such stray incidents of mass mortality, because they might be the precursor to an impending disease outbreak in frogs in the region.

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11. ON A RECORD OF *BADIS BADIS* (HAMILTON) (TELEOSTEI: PERCIFORMES: BADIDAE) FROM TAMIL NADU, INDIA

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India is endowed with a vast fish biological resource representing more than 10% of the world's fish diversity (Das and Pandey 1998). The diversity of indigenous aquarium fish has been documented; however, many species are being indiscriminately caught from their natural habitats leading to their depletion and probable extinction. *Badis* is one such fish which belongs to Family Nandidae and Subfamily Badinae. The first badid species were described by Hamilton (1822) as *Labrus badis* with a lateral line and 17 dorsal spines, and without lateral line and 14 dorsal spines in *L. dario*. Bleeker (1854) established *Badis* as a genus to include these species (Kullander and Britz 2002), which was also recognized by Day (1878). *Badis badis* with highly variable

colour was found to be distributed from Pakistan to Myanmar. The genus was revised recently by Kullander and Britz (2002) with the description of 10 new species from the various geographical zones while limiting the distribution of the species *Badis badis* to the lowlands of the Ganges, Brahmaputra and Mahanadi basins, in Nepal, India and Bangladesh. They recognized 2 genera, *Badis* with 12 species and *Dario* with 3 species.

Badis badis is recognised from its congeners (Kullander and Britz 2002) in the combination of the following characters, namely a conspicuous dark blotch covering superficial part of cleithrum above pectoral fin base; absence of dark caudal peduncle blotch; in the presence of a series of

prominent dark blotches along dorsal fin base and a series of dark blotches along middle of dorsal fin; with indistinct bars on sides; in having 25-27 (rarely 28, usually 26) scales in lateral row, in the presence of 19-20 circumpeduncular scales among other characters.

Badis is sometimes called the Dwarf Chameleon Fish due to the considerable colour changes. Predominantly brown with patterned black or red bars, the male will change to a bluish-black pattern with iridescent blue showing in the dorsal, anal, and caudal fins during breeding times and is known only from northern drainages (Menon 1999). The distribution of the species is known to be from Ganges, Yamuna, Brahmaputra (Menon 1999), Godavari drainage (Karmakar and Datta 1998), and from the Mahanadi (Menon 1951). The authentic southernmost limit of *Badis* has been recorded as Mahanadi and Godavari river drainage (Kullander and Britz 2002). A report from Trivandrum, Kerala (Herre 1941), is not vouched in any recent publication. During a fish survey conducted by the first author, *Badis badis* was found in the Chembarampakkam tank in Tamil Nadu. Subadult and adult specimens were collected using a

hand dip net in the clear waters in the overflow area of the tank. The fish is beautifully coloured and has bright red edges on the dorsal fin; has a series of prominent dark blotches along dorsal fin base and has indistinct bars on the body. Though there is a record of this species from Bombay (now Mumbai) and Madras by Day (Kullander and Britz 2002), this species has not been previously recorded from any of the drainages of Tamil Nadu (Menon 1999). Day's Madras is the erstwhile Madras Presidency, which also includes parts of Kerala, Andhra Pradesh, Karnataka and Orissa. This fish could have avoided capture in all the previous surveys due to its hiding behaviour in the aquatic vegetation or more likely could have been brought in by the Krishna Water Supply Scheme, which was directly conveyed to Chembarampakkam lake only during January 2007 (Anon 2007).

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12. TAXONOMIC STUDIES ON SOME SPECIES OF *OXYA* SERVILLE (ORTHOPTERA: ACRIDIDAE) OF KASHMIR HIMALAYA

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Introduction

The grasshoppers constitute an economically important group of insect. A large number of species can damage crops, and they can attack any type of vegetation in any part of the world including forage crops. In this respect grasshoppers

compete with cattle. This can affect the farmer's ability to use the pastures effectively. Besides, some grasshoppers feed on the most desirable forage plants in the rangeland, leaving the less desirable plants for cattle. The feeding of grasshoppers if coupled with drought conditions can cause long term